

What is Claimed is:

1. A device for controlling an amount of regenerative water to a dish washer having ion exchange resin for dropping hardness of washing water, and a regenerative water supply part for supplying regenerative water to restore a performance of the ion exchange resin, comprising:

 a memory part for storing information on hardness values of washing water and time periods of regenerative water supply relevant to the hardness values;

 an input part for providing the hardness value of the washing water intended to use;

 a display part for displaying information on a provided hardness value of washing water and the time period of regenerative water supply relevant to the hardness value; and

 a controlling part for retrieving the time period of regenerative water supply relevant to the provided hardness value of the washing water from the memory part, controlling the display part to display a retrieved time period of regenerative water supply, and controlling the regenerative water supply part to supply the regenerative water for the time period of regenerative water supply.

2. The device as claimed in claim 1, wherein the input part has a form of a knob.

3. The device as claimed in claim 2, wherein the hardness value of the washing water decreases if the knob is turned to left, and the hardness value of the washing water increases if the knob is turned to right.

4. A method for controlling an amount of regenerative water to a dish washer having ion exchange resin for dropping hardness of washing water, and a regenerative water supply

part for supplying regenerative water to restore a performance of the ion exchange resin, the method comprising the steps of:

receiving a hardness value of washing water intended to use;
retrieving, and displaying a time period of regenerative water supply relevant to a received hardness value of the washing water; and
supplying the regenerative water to the ion exchange resin for the retrieved time period of regenerative water supply.

5. The method as claimed in claim 4, wherein the step for receiving a hardness value of washing water intended to use includes the steps of;

determining if a cycle mode selected by a user is a mode for setting an amount of regenerative water supply,

displaying an initial hardness value of the washing water if the cycle mode selected by the user is the mode for setting an amount of regenerative water supply,

receiving a new hardness value of the washing water,

determining if the received hardness value of the washing water is definitive, and

storing a definitive hardness value of the washing water, if the hardness value of the washing water is definitive.

6. The method as claimed in claim 5, wherein the step for receiving a hardness value of washing water intended to use further includes the step of;

carrying out no mode for setting an amount of regenerative water supply, if the cycle mode selected by the user is not the mode for setting an amount of regenerative water supply, after the step of determining if a cycle mode selected by a user is a mode for setting an

amount of regenerative water supply.

7. The method as claimed in claim 5, wherein the step for receiving a hardness value of washing water intended to use further includes the step of;

repeating the step of receiving a new hardness value of the washing water, if the hardness value of the washing water is not definitive, after the step of determining if the received hardness value of the washing water is definitive.

8. The method as claimed in claim 4, wherein the step of retrieving, and displaying a time period of regenerative water supply relevant to a received hardness value of the washing water includes the steps of;

determining if a cycle mode selected by the user is a dish washing mode,

retrieving a stored definitive hardness value of the washing water, if the cycle mode selected by the user is the dish washing mode,

retrieving a time period of regenerative water supply relevant to a retrieved definitive hardness value of the washing water, and

displaying the retrieved time period of regenerative water supply.

9. The method as claimed in claim 8, wherein the step of retrieving, and displaying a time period of regenerative water supply relevant to a received hardness value of the washing water further includes the steps of;

stopping operation of controlling an amount of regenerative water supply after step of determining if a cycle mode selected by the user is a dish washing mode, if the cycle mode selected by the user is not the dish washing mode.

10. A method for controlling an amount of regenerative water to a dish washer having ion exchange resin for dropping hardness of washing water, and a regenerative water supply part for supplying regenerative water to restore a performance of the ion exchange resin, the method comprising the steps of:

determining if a cycle mode selected by a user is a mode for setting an amount of regenerative water supply,

displaying an initial hardness value of the washing water if the cycle mode selected by the user is the mode for setting an amount of regenerative water supply,

receiving a new hardness value of the washing water,

determining if the received hardness value of the washing water is definitive,

storing a definitive hardness value of the washing water, if the hardness value of the washing water is definitive,

determining if a cycle mode selected by the user is a dish washing mode,

retrieving a stored definitive hardness value of the washing water, if the cycle mode selected by the user is the dish washing mode,

retrieving a time period of regenerative water supply relevant to a retrieved definitive hardness value of the washing water,

displaying the retrieved time period of regenerative water supply, and

supplying the regenerative water to the ion exchange resin according to the retrieved time period of regenerative water supply.

11. The method as claimed in claim 10, wherein the step for receiving a hardness value of washing water intended to use further includes the step of;

carrying out no mode for setting an amount of regenerative water supply, if the cycle mode selected by the user is not the mode for setting an amount of regenerative water supply, after the step of determining if a cycle mode selected by a user is a mode for setting an amount of regenerative water supply.

12. The method as claimed in claim 10, wherein the step for receiving a hardness value of washing water intended to use further includes the step of;

repeating the step of receiving a new hardness value of the washing water, if the hardness value of the washing water is not definitive, after the step of determining if the received hardness value of the washing water is definitive.

13. The method as claimed in claim 10, wherein the step of retrieving, and displaying a time period of regenerative water supply relevant to a received hardness value of the washing water further includes the steps of;

stopping operation of controlling an amount of regenerative water supply after step of determining if a cycle mode selected by the user is a dish washing mode, if the cycle mode selected by the user is not the dish washing mode.